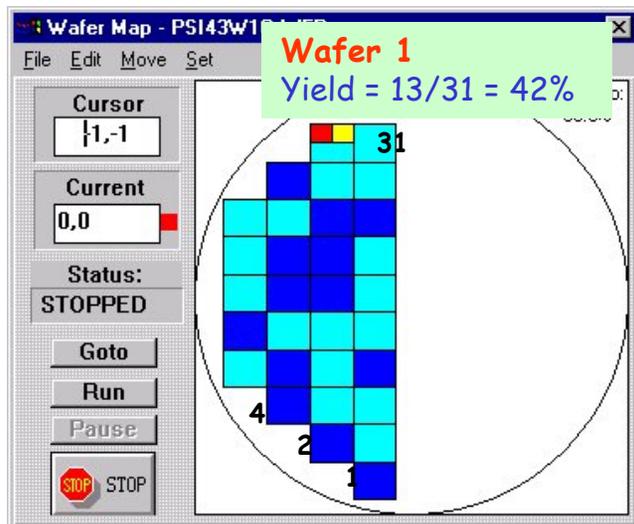
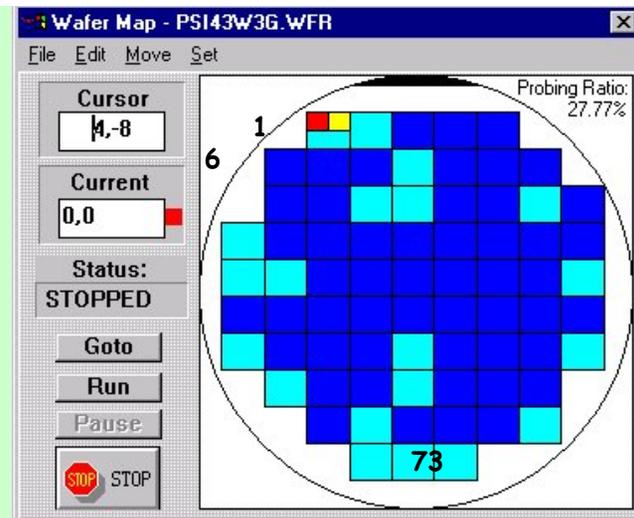


# Wafer testing results



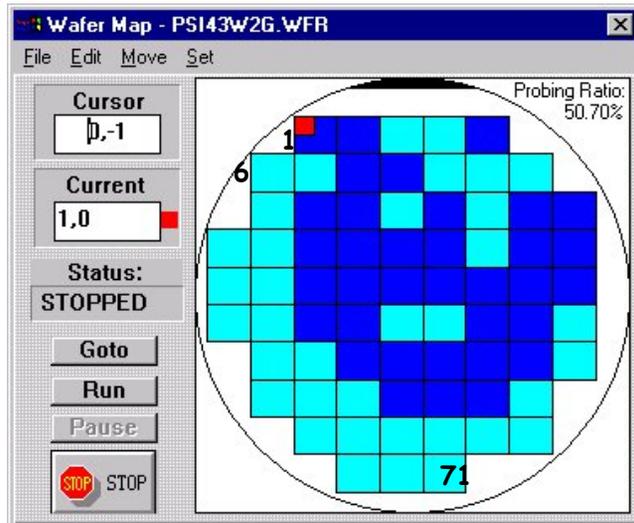
## Notes

- All three wafers were tested with default DAC settings and default Vref = -1.3V
- Good chips are those with stable and good response on more than 20 double columns, using default settings
- Marginal chips are those with good response on less than 20 double columns and/or multiple hits or no hits on some columns, using default settings
- Non standard chips include chips that are responding (either as a 'good' or 'marginal' kind of) only when Vref and/or default DAC settings are modified
- Responding chips (good plus marginal plus non standard) are the dark blue ones



## Wafer 3 with bumps (42025-03)

- Good chips = 37 (51%)
- Marginal chips = 4 (5%)
- Non standard = 11 (15%)
- Total responding chips = 52 (71%)



## Wafer 2 with bumps (42025-04)

- Good chips = 16 (22%)
- Marginal chips = 9 (13%)
- Non standard = 10 (14%)
- Total responding chips = 35 (49%)

# Wafer 2 testing results

ID	Category	Comments
1	M,S	26 Dcol OK, NH in Dcol 1,5,7,9,16,18,20,26
2	G,N	FIFO data is empty
3	F	OSC
4	F	No Token Out
5	G,S	25 Dcol OK, Dcol 2 with one hit, Vref = -1.3V
6	F	OSC
7	F	UB, B and LD present, NH or OSC
8	G,S	25 Dcol OK, Dcol 5 with NH
9	G,S	26 Dcol OK
10	F	OSC
11	F	OSC
12	F	OSC
13	F	OSC
14	G,S	25 Dcol OK, Dcol 10 with NH
15	G,S	25 Dcol OK, Dcol 5 with 3 hits
16	F	Not Responding
17	G,N	25 Dcol OK, Dcol 9 with one hit, Vref = -1.4V
18	F	UB, B and LD present, NH
19	G,N	25 Dcol OK, Dcol 3 with no hits, Vref=-1.3V
20	G,N	25 Dcol OK, Dcol 20 is bad, Vref=-1.55V
21	F	UB, B and LD present, NH or OSC
22	F	UB, B and LD present, NH or OSC
23	G,N	26 Dcol OK, Vref=-2.21V
24	M,S	17 Dcol OK, Dcol 3 NH, 4,9,13-16,24-25 one hit
25	G,S	25 Dcol OK, Dcol 3 with 3 hits
26	G,N	25 Dcol OK, Dcol 22 with one hit, Vref = -1.4V
27	F	UB, B and LD present, NH
28	G,S	26 Dcol OK
29	G,S	24 Dcol OK, Dcol 4,7 with NH
30	F	UB, B and LD present, NH
31	F	UB, B and LD present, NH or OSC
32	M,S	26 Dcol OK, bad pixel addresses
33	G,S	26 Dcol OK
34	G,S	26 Dcol OK
35	G,N	25 Dcol OK, Dcol 14 with 3 hits

ID	Category	Comments
36	G,N	26 Dcol OK, Vref=-1.44V
37	G,S	26 Dcol OK
38	G,N	26 Dcol OK, Vref=-1.53V
39	F	UB, B and LD present, NH or OSC
40	F	UB, B and LD present, NH or OSC
41	G,N	26 Dcol OK, Vref=-1.5V
42	G,S	26 Dcol OK
43	F	MH or NH
44	F	UB, B and LD present, NH
45	G,S	26 Dcol OK
46	G,S	26 Dcol OK
47	F	OSC
48	F	OSC
49	F	OSC
50	G,S	23 Dcol OK, Dcol 1,11,22 with NH
51	M,S	9 Dcol OK, Dcol 6 with NH, 11-26 with empty FIFO
52	G,S	25 Dcol OK, Dcol 24 with NH
53	M,S	18 Dcol OK, Dcol 6-13 with MH
54	M,S	0,1,2,3 or 4 hits, all Dcol respond
55	F	OSC
56	F	OSC
57	F	OSC
58	F	UB, B and LD present, NH
59	M,S	18 Dcol OK, Dcol 1,4,9,13,17,20,21,24 with one hit
60	M,S	0,1,2,3 or 4 hits, all Dcol respond
61	M,S	20 Dcol OK, Dcol 1,4,8,18,20 with NH, 22 with 3 hits
62	F	OSC
63	F	OSC
64	F	UB, B and LD present, NH
65	F	OSC
66	F	OSC
67	F	OSC
68	F	UB, B and LD present, NH
69	F	OSC
70	F	UB, B and LD present, NH
71	F	UB, B and LD present, NH

# Wafer 3 testing results

ID	Category	Comments
1	F	UB, B and LD present, NH
2	F	Not Responding
3	G,S	26 Dcol OK
4	M,S	9 Dcol OK, some with MH
5	G,S	26 Dcol OK
6	M,S	19 Dcol OK, 8Dcol with 0,1 or 2 hits
7	G,S	26 Dcol OK
8	G,S	26 Dcol OK
9	F	one Dcol respondin when CalDel=C0
10	G,S	26 Dcol OK
11	G,S	26 Dcol OK
12	G,N	26 Dcol OK, Vref=-1.7V
13	F	UB, B and LD present, NH
14	G,S	26 Dcol OK
15	G,S	26 Dcol OK
16	F	No Token Out
17	F	No LD
18	G,S	26 Dcol OK
19	G,S	26 Dcol OK
20	F	UB, B and LD present, NH or OSC
21	G,N	26 Dcol OK, Vref=-2V
22	F	UB, B and LD present, NH
23	G,S	26 Dcol OK
24	G,S	25 Dcol OK, Dcol 4 with one hit
25	G,S	26 Dcol OK
26	G,N	all 26 Dcol responds, some with MH, Vref=-1.7V
27	G,N	MH or NH on some DCOL, Vref=-1.7V
28	G,S	26 Dcol OK
29	G,S	26 Dcol OK
30	G,S	26 Dcol OK
31	F	No Token Out
32	F	UB, B and LD present, NH
33	G,S	26 Dcol OK
34	M,S	first 8 Dcol OK, then NH
35	G,S	26 Dcol OK

ID	Category	Comments
36	G,S	26 Dcol OK
37	G,S	26 Dcol OK
38	G,S	26 Dcol OK
39	F	OSC
40	G,S	26 Dcol OK
41	G,S	26 Dcol OK
42	G,S	26 Dcol OK
43	G,S	25 Dcol OK, Dcol 8 with one hit
44	G,S	26 Dcol OK
45	G,N	26 Dcol OK, Vref=-2V
46	G,N	26 Dcol OK, Vref=-2V
47	G,N	1H or NH on some DCOL, Vref=-2V
48	G,N	MH or NH on some DCOL, Vref=-2V
49	F	OSC
50	G,N	25 Dcol OK, Dcol 24 with 3 hits, Vref=-2V
51	G,S	25 Dcol OK, Dcol 17 with one hit
52	G,S	26 Dcol OK
53	F	MH, not able to clear previous cells
54	M,S	first 6 Dcol OK, then NH
55	G,N	1H or NH on DCOL3,4,14,15-26, Vref=-2V
56	G,S	26 Dcol OK
57	F	UB, B and LD present, NH
58	F	No Token Out
59	G,S	26 Dcol OK
60	G,S	26 Dcol OK
61	F	No Token Out
62	G,S	26 Dcol OK
63	G,S	24 Dcol OK, Dcol 13, 19 with one hit
64	G,S	21 Dcol OK, Dcol 3,8,26 with one hit, 15,17 with NH
65	G,S	26 Dcol OK
66	F	Very small UB level
67	G,S	25 Dcol OK, Dcol 2 with one hit
68	G,S	24 Dcol OK, Dcol 1 with 4 hits, Dcol 13 with one hit
69	G,N	MH or NH on some DCOL, Vref=-1.85V
70	F	No Token Out
71	F	UB, B and LD present, NH
72	F	OSC
73	F	NH or Unstable hits on some DCol